

## **REMARKS/ARGUMENTS**

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

### **I. STATUS OF THE CLAIMS AND FORMAL MATTERS**

Claims 1-7, 9-15 and 17, which have been amended, are pending in this application. Claims 8 and 16 have been canceled without prejudice or disclaimer of subject matter. Claims 1, 9 and 17 are independent. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled. Claim 8, which was objected to, has been canceled, thereby obviating the objection.

### **II. REJECTIONS UNDER 35 U.S.C. §102(e) and 35 U.S.C. §103(a)**

Claims 1-4, 8-12, 16 and 17 were rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No, 6,148,205 to Cotton (hereinafter, merely "Cotton"). Claims 5-7 and 13-15 were rejected under 35 U.S.C. 103 (a) as allegedly unpatentable over the combination of Cotton and U.S. Patent No. 5,463,659 to Nealon (hereinafter, merely "Nealon"). Applicants respectfully traverse the rejections.

### III. RESPONSE TO REJECTIONS

Claim 1 recites, *inter alia*:

“...switching coverage area of two or more of said portable radio devices to be mutually authenticated from the first coverage area to the second coverage area, the second coverage area being smaller than the first coverage area;

the two or more portable radio devices to be mutually authenticated having the second coverage area being brought with in proximity to one another so that the coverage areas overlap...

preventing communication with an unintentional portable radio device by narrowing the coverage area of both portable radio devices to be mutually authenticated before authentication initiates” (emphasis added)

Applicants respectfully submit that Cotton fails to teach or suggest the above-identified features of Claim 1.

As understood by Applicants, Cotton, col. 2, lines 28-40; Fig. 1, describes, “[a]n access device 104 is moved close to the base station and then registration occurs,” and “...the base station 102 transmitting at a low RF power level when registration is initiated.” The procedure of the authentication of Cotton is that 1) reducing RF power of one of the devices to be authenticated, 2) transmitting registration initiation message, 3) reducing RF power of the other device if approved. (Fig. 1-3) Thus, the authentication, as described by Cotton, is performed between a fixed base station and the access device (one is an active device, and the other is a passive device), and the passive device has to wait for a registration initiation message to enter “the authentication mode” (i.e., at a low RF power level).

However, as recited in Claim 1, the present invention 1) switches coverage area of both of the portable radio devices to be mutually authenticated from the first coverage area to the second coverage area, the second coverage area being smaller than the first coverage area, 2) both of said portable radio devices having second coverage area being brought with in proximity to one another so that the coverage areas overlap. Thus, the authentication is performed between

portable radio devices (their relationship is not active-and-passive), and both of the devices to be mutually authenticated enter the authentication mode before coming close to each other.

Applicants submit that a technical problem associated with Cotton is that the passive device cannot prevent communication with an unintentional device when there are plural radio devices within the coverage area of the passive device since its coverage area is maintained until receiving an authentication initiation message. Furthermore, because the base station is fixed it cannot prevent communication with the unintentional device and cannot specify the device that is to be authenticated in the case there are plural radio devices within coverage area of the passive device. (Fig 6)

On the other hand, the present invention can prevent communication with the unintentional device by narrowing the coverage area of both portable devices to be mutually authenticated before authentication initiates, and can specify the other device to be mutually authenticated in a one-to-one relation by coming closer to each other (because both device are portable) both having smaller coverage area.

For at least the above-cited reasons, it is submitted that claim 1 is patentable. Further it is submitted that the relied upon portions of Nealon do not overcome the deficiencies of Cotton.

Claims 9 and 17 are similar, or somewhat similar, in scope and are patentable for similar, or somewhat similar, reasons.

#### **IV. DEPENDENT CLAIMS**

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the same

reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

### **CONCLUSION**

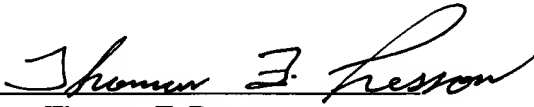
In the event the Examiner disagrees with any of statements appearing above with respect to the disclosures in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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